Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

1-42. (Canceled)

43. (Currently amended) A polymeric material with a molecular imprint made Polymeric particles, which are molecularly imprinted, produced by a process comprising the steps of:

expanding through a nozzle or an orifice a mixture containing a propellant in liquid form, and monomers, and a template which does not covalently bond to said monomers to form particles containing said monomers in the presence of said template and to release said propellant from said mixture in the form of a cas;

introducing a template into said particles, which does not covalently bind to said monomers:

polymerizing said monomers in said particles in the presence of said template to form composite particles having polymer and template, wherein said template is not covalently bound to said polymer; and

extracting said template from said composite particles without distorting a morphology of said composite particles to provide polymerized particles imprinted by said template with a size and arrangement of chemical functional groups complementary to said template

wherein said polymerized particles imprinted by said template are 1 micron or less in size.

44-80. (Canceled)

- 81. (New) The polymeric particles of claim 43 wherein said polymerizing step is performed by exposing said particles to radiant energy while said particles are in flight in a direction away from said nozzle or orifice.
- 82. (New) The polymeric particles of claim 43 wherein said template is selected from the group consisting of proteins and nucleic acids.

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83. (New) The polymeric particles of claim 43 wherein said polymer is selected from the group consisting of diolefinic compounds.